(19) World Intellectual Property Organization

International Bureau





(43) International Publication Date 6 October 2005 (06.10.2005)

PCT

(10) International Publication Number WO 2005/093081 A1

(51) International Patent Classification⁷:

C12P 13/04

(21) International Application Number:

PCT/EP2005/002933

(22) International Filing Date: 18 March 2005 (18.03.2005)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

10 2004 014 280.7 22 March 2004 (22.03.2004) DE

- (71) Applicant (for all designated States except US): DE-GUSSA AG [DE/DE]; Bennigsenplatz 1, 40474 Düsseldorf (DE).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): GRÖGER, Harald [DE/DE]; Akademiestrasse 31, 63450 Hanau (DE). WERNER, Helge [DE/DE]; Innerer Ring 17, 63486 Bruchköbel (DE). ALTENBUCHNER, Josef [DE/DE]; Hindenburgstrasse 6, 71154 Nutringen (DE). MENZEL, Anne [DE/DE]; Pfarrwiesenallee 40, 71067 Sindelfingen (DE). HUMMEL, Werner [DE/DE]; Claudiusstrasse 11, 52445 Titz (DE).

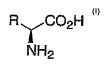
- (74) Common Representative: DEGUSSA AG; Intellectual Property Management, Patente und Marken, Standort Hanau, Postfach 13 45, 63403 Hanau (DE).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: PROCESS FOR PREPARING OPTICALLY ACTIVE AMINO ACIDS USING A WHOLE-CELL CATALYST



(57) Abstract: The present invention relates to a process for preparing, in particular, enantiomerically enriched L- α -amino acids, in particular those of the general formula (I). In this connection, the process according to the invention uses 2-ketocarboxylic acids which are converted into the desired products using a whole-cell catalyst which comprises an amino acid dehydrogenase and a cofactor-regenerating enzyme.